

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/EP2005/050160

International filing date (day/month/year)  
17.01.2005

Priority date (day/month/year)  
09.02.2004

International Patent Classification (IPC) or both national classification and IPC  
G07F13/10

Applicant  
NECTA VENDING SOLUTIONS S.P.A.

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2005/050160

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/EP2005/050160

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**Box No. II Priority**

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1. ☐ The following document has not been furnished:

☐ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. ☒ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

4. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-17
	No: Claims	
Inventive step (IS)	Yes: Claims	1-17
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

- 1 The following documents are referred to in this communication:  
D1 : US 6 102 246 A (GOULET ET AL) 15 August 2000 (2000-08-15)  
D3: WO 01/82249 A (NECTA VENDING SOLUTIONS S.P.A) 1 November 2001  
(2001-11-01)  
D5: GB-A-2 214 171 ( SOCIETE INDUSTRIELLE D'APPAREILS AUTOMATIQUES)  
31 August 1989 (1989-08-31)
  
- 2 Document D1, which is considered to represent the most relevant state of the art, discloses a beverage vending machine comprising:
  - a turret for accommodating one or more stacks of cups (col. 2, lines 41-47 and fig. 1);
  - support means associated to the turret, which cooperate with the first cup in order to support the stack (col. 2, lines 41-47, col. 9, lines 4-14 and fig. 17A);
  - an arm moving between a release position and a gripping position, and provided with jaws capable of moving relative to each other (col. 5, line 47 -col. 6, line 39, fig. 6 and fig. 7B);
  - a receptacle comprising one or more compartments for receiving cups removed from the stack (col. 6, line 60 -col. 7, line 12 and fig. 1).

From this, the subject-matter of independent claim 1 differs in that at least one of the first and second jaws comprises actuation means that cooperate with the support means to cause a cup to be removed from the stack and comprises at least a movable hook adapted to get engaged between the upper edge of the cup to be removed and the upper edge of the next cup in the same stack, when the arm is in the gripping position. The subject-matter of claim 1 is therefore novel (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as:

- ensuring that a single cup is removed from the stack when the arm is in the gripping position.

A similar solution (to the solution provided by the present application) to this problem involving the use of a movable element adapted to get engaged between the upper edge of the cup to be removed and the upper edge of the next cup in the same stack is known from the prior art (see for example document D5, abstract, figures 1 and 3). However, even if this solution were applied to the beverage vending machine of document D1, it would not be obvious to the person skilled in the art to adapt the cup release means of the vending machine so that the movable element is positioned on the jaws of the arm. Without this feature the resulting more complex system would require separate actuation of the cup release means and the cup positioning means and synchronization between the cup-releasing and cup-gripping steps (see for example the vending machine disclosed in document D3, p. 3, line 28 - p. 4, line 16). Thus, the solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT).

- 3 Claims 2-17 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

#### **Re Item VII**

##### **Certain defects in the international application**

- 1 The present set of claims contains two claims with number 16 which define different subject-matter. For the purpose of this written opinion the second of these claims (i.e. the last claim) will be considered to have number 17.  
This minor clarity issue should be resolved.